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TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

June 19, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor SC

FROM: April A. Abate, Environmental Scientist III/Lead and Hydrologist aaa 8.1.2012

RE: Phase II Bond Release Application, Plateau Mining Corporation, Willow Creek Mine, C/007/0038, Task ID #4094

SUMMARY:

The Permittee has submitted a package applying for Phase II Bond Release on a total of 95.40 acres of land in the Willow Creek permit area. This is broken down into the areas as follows:

18.35 acres - Surface Facilities/Conveyor Corridor
38.34 acres - Schoolhouse Canyon Preparation Plant, Loadout, and Refuse Pile
5.75 acres - Gravel Canyon (the former topsoil pile)
32.96 - Crandall Canyon area (mine shafts to No. 3 and No. 5 mines)

Currently, a performance bond in the amount of 1,424,514 is being held to ensure reclamation is accomplished. With the approval of Phase II bond release on these areas, a total of $935,348 will be released to the Permittee.

Information provided in the Earth Fax Engineering study provides further evidence that suspended solids sediments are not contributing pollution to receiving drainages. All hydrologic reclamation work completed to date appears to be within the guidelines of Phase II Bond Release criteria.

RECOMMENDATIONS:

Phase II Bond Release approval is recommended on all areas applied for in this application.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

The application package contains a summary of the reclamation history of the permit area, a vegetation monitoring study done in 2008, sediment yield calculations performed for all areas included in the Phase II application, a public notice, landowner and government agency notification letter including the Section, Township and Ranges locations of the areas included in the Phase II application, a bond reduction calculation worksheet, and drawings of each of the areas included in the Phase II application.

Findings:

The Permittee has provided sufficient information for the Division to conduct a Phase II bond release review.

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The permit area post mining land use is designated as wildlife habitat, grazing and recreation usage.

Findings:

The reclamation practices performed are in accordance with the postmining land use and meets the Phase II Bond Release criteria.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Hydrologic Reclamation Plan

The Permittee provided sediment yield calculations for each of the respective areas applied for in the Phase II application. The report was prepared by Earth Fax Engineering using the universal soil loss equation (RUSLE) using both the pre-disturbance and post-reclamation scenarios.
The factors take into account rainfall runoff, soil erodibility, length of slope, cover management, and support practice.

In each of these areas, sediment yields were calculated to be less under the post-reclamation scenario than the pre-mining disturbance scenario. This is due to the reclamation earthwork completed, such as pocking have provided for better erosion control then how the land would behave if it were still under non-disturbed conditions.

Findings:

The information provided in the Earth Fax Engineering study provides further evidence that suspended solids sediments are not contributing pollution to receiving drainages. All hydrologic reclamation work completed to date appears to be within the guidelines of Phase II Bond Release criteria.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Reclamation Maps

Three drawings were submitted as part of the Phase II application as Exhibit 24. The Crandall Canyon Reclamation Treatment Area map depicts the total disturbed acreage in Crandall Canyon as 32.96 acres. These areas are further broken down on the map as facilities area, topsoil stockpile, and total seeded acreage. The two backfilled mine shafts are also depicted on this map.

The mine facilities and conveyor drawing shows the areas applied for in this Phase II application and broken down by the total disturbed acres, total seeded acres, and the areas where Phase III bond release has already been achieved. The third drawing depicts the refuse pile, loadout in the Gravel Canyon and Schoolhouse Canyon areas. The areas are further broken down by the total disturbed acreage in each area and total seeded area acreage and areas where Phase III bond release has already been achieved.

Certification Requirements

All maps were certified by Richard B. White, Professional Engineer No. 168246.

Findings:

The information provided on the reclamation maps meets the requirements for Phase II bond release.

RECOMMENDATIONS:

Phase II Bond Release approval is recommended on all areas applied for in this application.

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